09/936,146

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*** YOU HAVE NEW MAIL ***

=> s inhibit?(3a) self splic?
L1          121 INHIBIT?(3A) SELF SPLIC?

=> s l1 and Group I intron
L2           68 L1 AND GROUP I INTRON

=> s l2 and precursor (3a) RNA
L3            7 L2 AND PRECURSOR (3A) RNA

=> s l3 and exon
L4            4 L3 AND EXON

=> d l4 bib abs 1-4

L4   ANSWER 1 OF 4  WPIDS  COPYRIGHT 2005 THE THOMSON CORP on STN
AN   2000-638210 [61]   WPIDS
DNC  C2000-191938
TI   Group-I intron self-
     splicing reaction inhibitor for treating diseases caused
     by pathogenic fungi, has oligonucleotide having sequence that binds to 5'
     internal guide sequence of precursor RNA containing
     intron.
DC   B04 D16
IN   DISNEY, M D; GRYAZNOV, S M; TESTA, S M; TURNER, D H
PA   (GERO-N) GERON CORP; (UYRP) UNIV ROCHESTER
CYC  91
PI   WO 2000055374   A1 20000921 (200061)* EN   37
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE
            ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
            LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK
            SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2000038927   A  20001004 (200101)
ADT  WO 2000055374 A1 WO 2000-US7045 20000315; AU 2000038927 A AU 2000-38927
     20000315
FDT  AU 2000038927 A Based on WO 2000055374
PRAI US 1999-124451P      19990315
AN   2000-638210 [61]   WPIDS
AB   WO 200055374 A UPAB: 20011129
     NOVELTY - An inhibitor (I) of a Group-I intron
```

(IN) self-splicing reaction comprises an oligonucleotide (ON) having a polynucleotide sequence that binds to a 5' internal guide sequence (IGS) of a **precursor RNA** containing a (IN), or to a portion.
(ON) is capable of binding with the IGS and of being trans-spliced to the 3' **exon** of the **precursor RNA**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a composition comprising (I) and a carrier; and

(2) designing (I) comprising choosing a nucleotide sequence that binds to IGS present in **precursor RNA** containing (IN), or to a portion, and preparing an (ON) having the chosen sequence.

ACTIVITY - Fungicide.

MECHANISM OF ACTION - **Inhibitor** of (IN) **self-splicing** reaction. Pneumocystis carinii splicing reactions were conducted by reannealing about 180 nM of internally radiolabeled **precursor RNA** at 55 deg. C in a buffer containing MgCl2 and slow cooling to 37 deg. C. A 3 micro l solution of buffer containing either 2 mM pG and/or 60 micro M (dA)n(dT)n(dG)n(dA)n(dC)n(rU) or neither was added and allowed to react for 1 hour at 37 deg. C. To check sequence specificity, the self-splicing reaction was conducted with the control oligonucleotide (dC)n(dA)n(dG)n(dT)n(dA)n(rU) as above under conditions that maximized production of the 5'**exon**-intron band with (dA)n(dT)n(dG)n(dA)n(dC)n(rU). The results showed that in the absence of pG and (dA)n(dT)n(dG)n(dA)n(dC)n(rU) the hydrolytic production of the 5' **exon**-intron band at 2mM Mg2+ was about 10 times less than in the presence of (dA)n(dT)n(dG)n(dA)n(dC)n(rU).

USE - (I) is useful for **inhibiting self-splicing** of (IN) by contacting a **precursor RNA** containing (IN) with an (ON) which trans-splices to a 3'**exon** sequence of **precursor RNA**. (I) is useful for inhibiting the growth of an organism transcribing a **precursor RNA** containing (IN) by contacting the organism with (ON) for growth inhibition (claimed). (I) is useful for treating a disease or condition caused by organisms such as Pneumocystis carinii, Candida albicans and Aspergillus nidulans containing (IN).

DESCRIPTION OF DRAWING(S) - The figure shows a schematic representation of the self-splicing (cis-splicing) and trans-splicing reactions of a **Group I intron**.

Dwg.1/7

L4 ANSWER 2 OF 4 USPATFULL on STN
AN 2004:39569 USPATFULL
TI Oligonucleotide directed misfolding of RNA
IN Turner, Douglas H., Pittsford, NY, UNITED STATES
Childs, Jessica L., Zurich, SWITZERLAND
Disney, Matthew D., Zurich, SWITZERLAND
PI US 2004030111 A1 20040212
AI US 2003-465730 A1 20030619 (10)
PRAI US 2002-390241P 20020619 (60)
DT Utility
FS APPLICATION
LREP Edwin V. Merkel, NIXON PEABODY LLP, Clinton Square, P.O. Box 31051, Rochester, NY, 14603-1051
CLMN Number of Claims: 85
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 2086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oligonucleotides that bind to and cause misfolding of functional RNA molecules are described. Also disclosed are the uses of the oligonucleotides to modify the function of such RNA molecules, to stabilize the RNA molecules in a misfolded conformation, to disrupt survivability of a pathogen or cancer cells (that require activity of the RNA molecule for survival) by disrupting the activity of the RNA molecules, treating or preventing pathogen infection in a patient, and treating a cancerous condition in a patient. Methods of designing the oligonucleotides of the present invention are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 4 USPATFULL on STN
AN 2003:57549 USPATFULL
TI SMALL MOLECULE MODULATION OF RIBOZYMES
IN CUI, MEI, ANN ARBOR, MI, UNITED STATES
CZARNIK, ANTHONY WILLIAM, SAN DIEGO, CA, UNITED STATES
MEI, HOUNG-YAU, ANN ARBOR, MI, UNITED STATES
PA Warner-Lambert Company,, Marris Plains, NJ (U.S. corporation)
PI US 2003040114 A1 20030227
AI US 1999-326956 A1 19990607 (9)
RLI Continuation of Ser. No. US 1997-923487, filed on 4 Sep 1997, ABANDONED
PRAI US 1996-24685P 19960905 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 719
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for selecting a compound that modulates the activity of a ribozyme in vivo in an organism comprising: (a) measuring in an assay the ability of a compound to selectively bind to a ribozyme thereby inhibiting the function of said ribozyme; and (b) selecting the assayed compound for use in modulating the activity of said ribozyme in vivo in an organism as a pharmaceutical agent as well as a method for selecting a compound for diagnosing the presence of a ribozyme in an organism that is pathogenic to an animal or plant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 4 USPATFULL on STN
AN 1998:157102 USPATFULL
TI In vitro assay for **inhibitors** of the intron **self-splicing** reaction in Pneumocystis carinii
IN Leibowitz, Michael J., Manalpan, NJ, United States
Liu, Yong, Piscataway, NJ, United States
PA University of Medicine & Dentistry of NJ, Piscataway, NJ, United States (U.S. corporation)
PI US 5849484 19981215
AI US 1995-491690 19950619 (8)
RLI Continuation of Ser. No. US 1993-68248, filed on 27 May 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-922987, filed on 30 Jul 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Myers, Carla J.
LREP Muccino, Richard R
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 27 Drawing Figure(s); 27 Drawing Page(s)
LN.CNT 1906
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention pertains to an in vitro method for assaying for an inhibitor of the catalytic Group I self-splicing intron reaction in the nuclear rRNA genes of Pheumocystis carinii which comprises the steps of (a) providing a DNA template containing the intron (I) from the 26S rRNA gene in Pneumocystis carinii and a portion of the 5' and 3' flanking exons (E1 and E2, respectively) between nucleotides 1963 and 2267 of 26S rRNA (660 nucleotides of amplified rRNA gene including the **group I intron**); (b) preparing an **RNA precursor** by transcription of the DNA template in the presence of labeled nucleoside triphosphates to produce a labeled **RNA precursor** (E1-I-E2); (c) purifying the **RNA precursor**; (d) incubating the **RNA precursor** and the inhibitor in the presence of guanosine triphosphate and magnesium ions; and (e) determining the degree of inhibition by the

inhibitor on the intron splicing reaction in the **RNA precursor** by measuring the amount of labeled splicing intermediates and splicing products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> s oligonucleotide? (5a) trans (3a) splic?
L6   .       25 OLIGONUCLEOTIDE? (5A) TRANS (3A) SPLIC?

=> s l6 and precursor RNA
L7            1 L6 AND PRECURSOR RNA

=> d l7 bib abs

L7   ANSWER 1 OF 1  USPATFULL on STN
AN     2000:157195  USPATFULL
TI     Intron-mediated recombinant techniques and reagents
IN     Jarrell, Kevin A., Lincoln, MA, United States
PA     Trustees of Boston University, Boston, MA, United States (U.S.
       corporation)
PI     US 6150141              20001121
AI     US 1997-814412          19970311 (8)
RLI    Continuation-in-part of Ser. No. US 1995-488015, filed on 7 Jun 1995,
       now patented, Pat. No. US 5780272 which is a continuation-in-part of
       Ser. No. US 1993-119512, filed on 10 Sep 1993, now patented, Pat. No. US
       5498531
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Degen, Nancy
LREP   Choate, Hall & Stewart, Pasternack, Sam, Jarrell, Brenda Herschbach
CLMN   Number of Claims: 19
ECL    Exemplary Claim: 1
DRWN   76 Drawing Figure(s); 64 Drawing Page(s)
LN.CNT 5034
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention makes available methods and reagents for novel
       manipulation of nucleic acids. As described herein, the present
       invention makes use of the ability of intronic sequences, such as
       derived from group I, group II, or nuclear pre-mRNA introns, to mediate
       specific cleavage and ligation of discontinuous nucleic acid molecules.
       For example, novel genes and gene products can be generated by admixing
       nucleic acid constructs which comprise exon nucleic acid sequences
       flanked by intron sequences that can direct trans-splicing of the exon
       sequences to each other. The flanking intronic sequences can, by
       intermolecular complementation, form a reactive complex which promotes
       the transesterification reactions necessary to cause the ligation of
       discontinuous nucleic acid sequences to one another, and thereby
       generate a recombinant gene comprising the ligated exons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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